ABSTRACT
        The Western Interstate Commission for Higher
Education (WICHE) received a year's grant from the Council on Library
Resources to design and develop a library network for 17 western
states. Major activities of the second quarter included: (1) hiring
the project director; (2) continuing to acquire information on recent
developments in networking; (3) visiting major library organizations
in the Pacific Northwest to explore their participation in the
network; (4) initiating a study of telecommunications needed for
libraries; (5) nominating the persons to be appointed to the network
organizing steering committee; and (6) preparing the first newsletter
to bring western librarians up to date on the project. The appendices
include a cost and funding study summary, financial report, survey
results, and the first newsletter. (Author/KP)

Initiating the design and development of a

Western Interstate Bibliographic Network

Second Quarterly Report

October-December 1975

by

Mary Duggan
Eleanor Montague
Karl M. Pearson, Jr.
Louise T. Martin

2

ABSTRACT

Major activities during the second quarter's work in developing a western bibliographic network included: 1) hiring the project director; 2) continuing to acquire information on recent developments in networking; 3) visiting major library organizations in the Pacific Northwest to explore their participation in the network; 4) initiating a study of telecommunications needed for libraries; 5) nominating the persons to be appointed to the network organizing steering committee; and 6) preparing the first Newsletter to bring western librarians up to date on the Project.

ACKNOWLEDGEMENT

3

DEFINITION OF ACRONYMS

The acronyms used in this report have the following meanings:

ALA -   American Library Association

AMIGOS -   Amigos Bibliographic Council, Richardson, Texas

ASIS -   American Society for Information Science

AT & T -   American Telephone & Telegraph Company

BALLOTS -   Bibliographic Automation of Large Library Operations using a Time-sharing System. This system, initially developed at Stanford University, began daily on-line operation in November 1972.

BCR -   Bibliographical Center for Research, Rocky Mountain Region, Inc., Denver, Colorado, formerly known as the Rocky Mountain Bibliographic Center

CLASS -   California Library Authority for Systems and Services. A joint powers agreement with signatories from six groups: the State Library, University of California, California State University and Colleges, county libraries, city libraries, and community colleges.

CLR -   Council on Library Resources, Inc. A foundation devoted to furthering the improvement of library service.

CLSI   Computer Library Services, Inc., Newtonville, Massachusetts. This firm produces a turnkey minicomputer-based system for circulation control and acquisitions.

ERIC -   Educational Resources Information Center, Washington, D.C.

FAUL -   A consortium of Five Associated University Libraries: Binghamton, Buffalo, Cornell, Rochester, and Syracuse.

ISSN -   International Standard Serial Number, assigned by a central organization in each country (LC in the United States) as a unique identifier for a serial publication.

LIBS 100 -   A minicomputer-based, turnkey, library system offered by CLSI for support of circulation control and acquisitions.

MIDLNET -   Midwest Library Network, a regional network covering several states.

NCLIS -   The National Commission on Libraries and Information Science. appointed by the President of the United States for the study and planning of improved library and information services in the nation.

4

NEBHE -   New England Board of Higher Education, based on an interstate
           compact among the New England states, undertakes cooperative
           and coordinative activites in the field of eoucation in that
           region of the country.

NELINET - The New England Library Information Network, a non-profit
           organization operated by the New England Board of Higher
           Education and designed to serve the libraries in six states,

OCLC -   Ohio College Library Center, a non-profit corporation char-
           tered in the state of Ohio to provide computer cataloging
           support for member libraries through on-line tie-in with
           remote terminals tied into the central computer system in
           Columbus, Ohio.

PNBC -   Pacific Northwest Bibliographic Center in Seattle, Washington.

SOLINET - A non-profit organization which provides the legal and or-
           ganizational and financial structure for 99 libraries in the
           southeastern area to tie in to the Ohio College Library Center.

SUNY -   State University of New York, consisting of a number of
           campuses located throughout that state.

USOE -   United States Office of Education.

WICHE -   Western Interstate Commission for Higher Education, a non-
           profit organization created by an Interstate Compact of 13
           states in 1953. It is dedicated to cooperative improvement
           of higher education throughout these 13 western states by
           the sharing of resources and expertise in that multi-state
           region. The basic program (student exchange across state·
           lines) is funded by state legislatures. The other 40+ programs
           are individually funded through grants or contracts.

WLN -   Washington Library Network.

INITIATING THE DESIGN AND DEVELOPMENT OF A

WESTERN INTERSTATE BIBLIOGRAPHIC NETWORK

SECOND QUARTERLY REPORT

OCTOBER - DECEMBER 1975

TABLE OF CONTENTS

INITIATING THE DESIGN AND DEVELOPMENT OF A

WESTERN INTERSTATE BIBLIOGRAPHIC NETWORK

SECOND QUARTERLY REPORT

OCTOBER - DECEMBER 1975

I.   INTRODUCTION

This is the second quarterly report on the progress of the Western Bibliographic Network project being performed by the Western Interstate Commission for Higher Education (WICHE) under terms of a grant from the Council on Library Resources (CLR). A separate summary (see Appendix D) describes activities of the Cost and Funding Studies, supported by a grant from the U. S. Office of Education (USOE), which are being performed as an integral part of the network design project.

The previous quarterly report described the events leading up to submission of a proposal to CLR for a project to design and develop a bibliographic network for the benefit of all types of libraries in the 17 western states and British Columbia. The project began on July 1, 1975 and the bulk of activity during the first quarter centered on acquiring a Project Staff, reviewing project objectives with the technical task force representing major potential components of the network, and establishing initial contacts with various agencies concerned in the improvement of library cooperation both within the West and nationally.

In the second quarter, we have focused our activity on completing the organization of the Network Staff, Steering Committee, and State Design Teams and in reviewing potential components and services for the Western Bibliographic Network. We have taken the first steps in setting up a pilot operation for the use of the Washington Library Network's bibliographic utility by libraries outside that state. In addition, discussions took place concerning the use of the BALLOTS system in the state of Nevada.

II.   PROJECT MANAGEMENT AND STAFFING

The Western Council for the WICHE Continuing Education and Library Resources Program (the State Librarians contributing funds through membership) caucused in Lexington, Kentucky on November 25, 1975. This caucus time and place were selected because all 50 Chief Officers of the State Library Agencies were meeting in Lexington and it seemed appropriate for the western librarians to get together at that time to save travel costs.

The purpose of the caucus was to review the network project progress and staffing and to seek the Western Council's guidance on network steering committee nominees. A second purpose of the caucus was to review with the Western Council the three proposals for USOE FY 77 funding, which were to be prepared and submitted during December and January. The Western Council caucus attendees endorsed the program and project activities and staffing recommendation regarding employment of the network project director.

7

On December 5-6, 1975, Maryann Duggan presented a report to the Commissioners of WICHE at their meeting. The three proposals to be submitted to USOE during December and January were approved by the Commissioners at this meeting. The Commissioners expressed a continuing strong interest in the Western Network and urged the program staff to move rapidly with the tasks of designing such a network for both academic and public libraries in the western states.

Staffing for the Project was completed during the quarter with the hiring of Eleanor Montague as Project Director. Eleanor was formerly the Assistant Manager for Project BALLOTS and had participated in planning activities for both California and western regional networking. Her resume was included in the first quarterly report.

Reexamination of the Project schedule in light of the need to focus on obtaining commitments from potential network members by the end of the grant period led to moving up activities related to organizing and funding the network. An early decision is needed on the legal basis for the Western Network and for its charter, bylaws, and organizational structure. These decisions will be made at or immediately following the first Steering Committee meeting scheduled for February 2-3, 1976.

III. PROJECT ACTIVITIES

During the first half of October, as described in the previous quarterly report, Karl Pearson, the Project's System Analyst, visited a number of libraries in California to collect information on potential network components in that state. At mid-month, staffing of the Project was completed with the hiring of Eleanor Montague as Project Director; she joined WICHE on December 8, 1975. Following a visit to WICHE by Paul Lagueux of CLR, Karl Pearson made a trip to New England to attend the American Society for Information Science (ASIS) annual conference and to visit the New England Library Network (NELINET) and Computer Library Services, Inc. (CLSI). During November, we initiated a study of telecommunications for the regional network. In December, Eleanor Montague visited the Pacific Northwest, meeting a number of the librarians in that area who are concerned with the project, and holding preliminary discussions with the Washington Library Network (WLN) staff concerning their role in a western network. We completed the quarter by preparing a slate of nominees to be appointed to the Steering Committee and arranging for a meeting of that body in the next quarter. (See Appendix C for a list of Steering Committee invitees, the letter of invitation and the tentative agenda.) See the first issue of the Newsletter (Appendix F) for the final list of Steering Committee members.

By the end of the quarter, we had completed several of the "products" to result from work performed under terms of the CLR grant (as of the June 10 1975 revision):

(1) The Project Staff was hired;

(2) The Network Steering Committee had been established;

(3) Several states had designated design teams to provide "grass roots" inputs.

In addition, we had nearly completed drafting a review of potential components and telecommunications for a western network.

8

The first quarter was devoted to setting up the project and acquiring staff. During this second quarter, the staff began acquiring information about the organizations and facilities around which a western network would be structured. This preparation should lead in the third quarter to the preliminary work involved in setting up a Western Network organization.

A. Site Visit by Paul Lagueux, CLR

On October 20, 1975, Paul Lagueux of CLR visited with the Project staff in Boulder. We discussed the status of the project to date and plans for activities during the remainder of the project. A key point developed in the discussion was that the objective of obtaining tangible commitment by potential network members by the end of the project was the key to success or failure of the project as a whole. The schedule and products listed in the grant proposal serve as stepping stones to that goal, rather than as independent tasks.

As a result of the site visit, the Project staff decided to concentrate on setting up the steering committee, exploring alternative legal bases for organizing the network, and identifying initial network products and services that will be offered to potential members to gain their commitment. The first deliverable product due under the grant proposal, a review of components upon which the network might be based, was accordingly reoriented slightly to serve as a background document for Steering Committee members in considering how the western network might relate to existing organizations and bibliographic services.

B. ASIS Annual Conference

Karl Pearson attended the American Society for Information Science (ASIS) Annual Conference in Boston, Massachusetts, October 24-29, 1975. A basic underlying theme for the conference was struck during a pre-conference workshop on "Managing the Library in Transition." Moving beyond a narrow concern with the technology of library automation within individual institutions, librarians must now grapple with the management issues surrounding use of automated services provided by outside suppliers and interaction with other libraries in a network. Resource sharing and library cooperation are now facts of library life by virtue of the existence of OCLC, WLN and BALLOTS, on-line search services, and regional network organizations.

Karl Pearson met representatives of other regional networks at the conference: James Kennedy of Amigos, Dick James and Charles Stevens of SOLINET, Tom Burgess and Barbara Markuson from the MIDLNET region, and John Aubrey of FAUL. Conversation centered on both technological and managerial details of network operation, and on the need for cooperation among the networks.

Technical sessions at the conference were most stimulating. One speaker predicted that within three years it should be possible to transfer software from large computers to minicomputers without reprogramming through the development of operating systems providing virtual memory capabilities; this would reduce computer facility costs by at least an order of magnitude for network operations. Members of the Council of Computerized Library Networks (CCLN) described the purposes and activities of that organization: to provide a forum for discussion and learning; to provide a means for communicating users' needs

9

to suppliers of automated services and communications; and to promote coordinated development of national and international networks. Dr. Lawrence G. Roberts described the Telenet packet-switching service, and announced that Lockheed and the State University of New York (SUNY) were using that telecommunications network.

A new Special Interest Group on Management was organized at the conference to address issues of concern to information center and network managers. Barbara Markuson made the point that information network management was an almost completely uncharted field. In addition to all the standard legal, accounting, personnel and financial problems of administering a new enterprise, the network manager has to deal with the fact that he has very little authority over network members; the manager must use leadership and persuasion, rather than issue orders, if anything is to be accomplished.

C. Visits to NELINET and CLSI

Pearson visited William D. Mathews at NELINET on November 3, 1975 to learn what was being done there in the use of telecommunications to support the New England network. Mathews stated that current line charges for OCLC use are about $2 per hour for New England libraries, most of which are located within 50 miles of Boston; the total annual bill for communications is about $150,000. Mathews estimates that this bill could be substantially reduced by use of a data concentrator and locally rented and maintained modems such as those marketed by Intertel. NELINET has PDP-11/10 and 11/45 minicomputers to support data concentration and message switching for New England libraries, and is close to negotiating an agreement with OCLC respecting a protocol governing data transmission between NELINET and OCLC, with NELINET handling communications within the region. NELINET will also build software for the minicomputers whereby the quality and reliability of service on the communication lines can be continually monitored; this will allow the staff to notify the telephone company immediately when service goes out-of-tolerance.

Mathews also described the organization and governance structure for NELINET, which is an operating agency of the New England Board of Higher Education (NEBHE), an organization similar to WICHE. NELINET has a 12-member executive committee elected by network members. This committee meets monthly to set network policy and make recommendations to the NEBHE Director, who has the final authority for implementation. There are also special advisory committees for cataloging, serials, government documents, and interlibrary communications, and Mathews employs system librarians at participating libraries as consultants and as a channel of communication w.th the member libraries. Mathews is also able to take advantage of NELINET's location in a high technology area to get advice and assistance from technical experts at local computer manufacturers, such as Digital Equipment Corporation, and universities such as Massachusetts Institute of Technology.

Pearson also visited Marion Mathison and Bela Hatvany at Computer Library Services, Inc. (CLSI), a manufacturer of the minicomputer-based turnkey LIBS 100 system for acquisitions and circulation control. Currently, the system operates on a PDP-11/05 and can handle 15 terminals, but in the near future will use a PDP-11/45 which can handle 50 terminals. Hatvany is very interested in inter-system communication and message switching, and mentioned that a limited

10

experiment along these lines is going on in Illinois. He also stated that he has had tentative discussions with Hank Epstein of BALLOTS in regard to interconnecting LIBS 100 with that system. Hatvany envisions that a cluster of CLSI systems could be connected to a switching center to support interlibrary loan/circulation and to a bibliographic utility such as BALLOTS to obtain cataloging data. At the moment, however, the LIBS 100 acquisitions module has been withdrawn from marketing as CLSI attempts to develop a standardized version that will support academic as well as public libraries.

D. Telecommunications Study Initiation

Because of the prospect of the Network Project serving as the agency for providing access to the Washington Library Network's system for the Billings Public Library and Eastern Montana College, described elsewhere in this report, the telecommunications study task was begun ahead of schedule. In addition to reviewing the recent literature on telecommunications, we established contact with state telecommunications planners (see Appendix G), common carriers and specialized common carriers (American Telephone & Telegraph, Tymshare, Telenet, Western Union, MCI Telecommunications and DATRAN), communications equipment and service firms (Hazeltine, International Business Machines, Western Telecomputing Corp.), and the technical staffs of WLN and BALLOTS (Douglas Kunkel and Hanan Bell).

In general, it appears that in the immediate future dial-up service supplied by Tymshare and Telenet will be available in most parts of the region excepting the northern Rocky Mountain states and Alaska. Dial-up service is useful for on-line reference, but it becomes very expensive when used for more than an hour or two each day, as is necessary for utilizing on-line cataloging service. For the latter kind of activity, only a multidropped line shared by a number of terminals seems economically justifiable. This would require the use of circuits leased from a common carrier plus a polling capability installed at the computer center.

From preliminary conversations with state telecommunications administrators, it appears likely that the Western Network would be able to lease lines (in excess of federal government requirements) through the state telecommunications agencies, at a GSA rate that is much cheaper than the rates charged by the common carriers. For example, a leased line from Montana to the WLN computer could be procured through the Montana Communications Division for about $600 per month, or $.54 per mile, as opposed to a price of about $3.00 per mile per month for a line leased from A T & T. However, some states do not appear to have offices that lease for state use the lines available from the federal government, and, since the lines are only those in excess of current federal needs, there is no guarantee for their continued availability.

WLN does not have a special polling capability. However, it does have the capability to support multidropping for IBM 3270-compatible terminals using the bi-synch line protocol. According to a survey of terminals published in the January 1976 edition of Datamation, there are several terminals available now that support this protocol, but the bulk of the equipment now marketed - especially on the cheaper end of the scale - runs on the asynchronous line protocol. The Zentec terminal being developed for BALLOTS to support the full MARC character set and the Omron terminal used by WLN for libraries in that state may therefore not be suitable for multidrop use unless a polling capability is developed, an activity that is not currently in prospect at WLN.

11

The initial study of telecommunications indicates the potential desirability of a library network's developing its own data communications facilities. This would allow the network to incorporate message switching and interconnection of libraries and computer utilities while at the same time reducing telecommunications costs.

E. Visits to the Pacific Northwest, Montana

During the one and a half weeks beginning December 8, Eleanor Montague visited libraries and institutions in Oregon, Washington, British Columbia and Montana. The strike at United Airlines necessitated cancelling the meeting at Cheyenne, Wyoming.

The trip had five purposes:

a) to acquaint the new Project Director with system components and requirements in the states visited;

b) to allow the new director to talk about network projects and to listen to thoughts from the field on the network;

c) to talk to the State Network Design Teams in Washington and Oregon;

d) to try to determine how the University of British Columbia might fit into a Western Network; and

e) to discuss the use of services from the Washington Library Network to the Billings Public Library.

In Oregon, Montague visited the University of Oregon to see the cataloging system implemented by the university with Blackwell North America. The next day, the Oregon State Network Design Team met at the State Library to discuss network activities.

In Washington state, visits were made with the Washington State Library, WLN, the University of Washington, Pacific Northwest Bibliographic Center (PNBC), and the statewide Automation Committee.

At WLN, Mary Jane Reed, Ralph Franklin, Doug Kunkel and Eleanor Montague discussed the use of WLN by the Billings Public Library. At a later meeting, there was an opportunity to discuss the network activities with the new Washington State Librarian, Roderick Swartz. An entire day was spent at the University of Washington and PNBC, exploring how PNBC could interface with the Western Network.

The University of British Columbia was interested in network activities but felt their first priority was in the provincial plan they were about to submit the week of the visit. The change in provincial government may delay action on the library plan. In summary, they felt that they would like to remain in contact but could make no promises for network involvement.

In Billings, Montana, Mary Jane Reed and Eleanor Montague met with Robert Cookingham, Director, Billings Public Library, and Edward Arnold, Director, Eastern Montana College Library. The decision was made to move ahead with plans to put up a pilot use of WLN in Billings, in both the public and college libraries.

12

It was agreed that all parties, including the Montana State Librarian and the Washington State Librarian, would meet in Chicago at the Midwinter ALA meeting to further discuss a WLN pilot project in Montana.

F. Potential Pilot Service Projects

As perhaps a measure of the need for a regional bibliographic network in the West, three opportunities for network assistance appeared during the quarter. The Nevada State Processing Center (Carson City) would like to have access to BALLOTS via a California telephone circuit, and the State Librarian (Joseph Anderson) is interested in the Network Project performing a coordinating role. Robert Cookingham, Director of the Billings Public Library in Montana, and Edward Arnold, Eastern Montana College Librarian, would like to have access to the WLN on-line bibliographic system, and are desirous of having the Network Project staff handle telecommunications, terminal acquisition, and training arrangements. A committee of the Montana Library Association, headed by Erling Oelz, Assistant Librarian, University of Montana, has a grant to develop a state union list of serials and has sought advice and technical assistance from our staff.

The Project views each of these opportunities as fitting in with the tasks of network design and organizational planning to which it is committed under the CLR grant. Dealing with the practical questions involved in connecting the Montana libraries to WLN, for example, provides a very practical focus for our study of optimal telecommunications services for a western network. In addition, our performance of some network operations, just on a pilot basis, would provide a selling point for obtaining commitment from potential network members by proving that the Network is performing as well as talking about services.

G. Nomination of Steering Committee Appointments

Appointment of the Western Network Steering Committee and arranging a Committee meeting were accorded high priority during the quarter. Nominations for appointments to the Steering Committee were solicited from state and academic librarians, in accordance with the criteria expressed in the Network grant proposal. Administrative arrangements were made to hold the Committee meeting in Boise, Idaho on February 2-3, 1976, as an easily reached central location with a good meeting facility.

A great deal of care was taken by all concerned to develop a list of Steering Committee nominees that would be geographically representative of the region, that would provide a good balance among state, academic, public and special librarians and library users, and that would consist of persons well-recognized for their abilities. The Steering Committee appointees are listed in Appendix C, together with the letter of invitation and a tentative agenda for the Committee meeting in Boise. As finally constituted, the Committee has one member from each state except Hawaii (whose nominee could not accept appointment); the states of California, Idaho, Oregon and Washington have two members. There are six state librarians, eight academic librarians, two public librarians, one special librarian, and four lay members on the Steering Committee. The final Steering Committee list is contained in the first issue of the Western Network Newsletter (Appendix F).

13

CLR and the National Commission for Libraries and Information Science (NCLIS) were invited to send a representative to address the Steering Committee at the Boise meeting; USOE was invited to send an observer. Dr. Ernest W. Hartung, President, University of Idaho, and a WICHE Commissioner, was invited, and accepted, to serve as chairman pro tem for the Boise meeting. Mr. T. John Metz, Executive Director of MIDLNET, and Oscar Miller, Head Law Librarian of the University of Colorado, also were invited to address the Committee.

H. Miscellaneous Activities

Based on information about the Council of Computerized Library Networks (CCLN) obtained at the ASIS Conference, we sent a letter of application to that organization. Mr. Charles Stevens, CCLN President, responded with an application form and a warning that only "operational" networks were eligible for membership. Since the Western Network does not now fit that definition, we will delay making a formal application until we are sure that favorable action will be taken on it.

Mr. Paul Janaske, Chief, Library Research and Demonstration Branch, Office of Libraries and Learning Resources, U.S. Office of Education (USOE), made a two-day site visit to the project on November 13-14, 1975 to discuss the Cost and Funding Studies. We discussed methods of handling project publications, such as quarterly reports. Although the reports should go to ERIC through USOE, the time lag for ERIC announcement and distribution is so lengthy that we should consider offering our publications for sale at the cost of reproduction. Mr. Janaske also made the point, echoing Mr. Lagueux of CLR, that the critical objective for the project was to convince potential participants to commit themselves to joining and paying for the network.

The staff prepared a proposal to USOE for a two-year research and demonstration project to develop an on-line location file and to investigate the file's impact upon interlibrary loan patterns in the West. The location file itself would contain the same elements as a numeric register: LC card number (LCCN) and holder codes for the owning libraries. However, the file would be hooked to the bibliographic data base of a utility such as WLN's so that all normal points of access could be used to most entries in the location file. A major objective for the project would be to include holdings of smaller libraries as well as those of the largest library in one area to investigate the potential of the smaller libraries for satisfying patron needs locally. A second major objective would be to investigate each state's potential for self-sufficiency in terms of library materials held and an equitable compensation for the differences in levels of state self-sufficiency causing imbalances in interstate interlibrary loan transactions.

In order to obtain data for the proposal, as well as for our review of potential network components, we carried out a mail questionnaire survey of the eleven western libraries using or installing a CLSI LIBS 100 circulation control system. A tabulation of survey responses is shown in Appendix B. While the libraries responding indicated that the system was used to control a wide variety of materials, not as many title records included the LCCN or other standard identifier as would be desirable for linking files together or to a bibliographic data base.

14

We devoted a significant amount of effort to, developing a mailing list for the newsletter during the quarter, as we wish to ensure that we communicate information about network activities and plans to all the people, within and without the West, who need to know about them. The mailing list includes: state librarians, academic librarians, heads of major public libraries and library consortia, heads of library associations, regional medical libraries, federal librarians, heads of other regional networks and bibliographic utilities, state design team and automation task force members, library school deans, heads of state telecommunications offices, WICHE Commissioners, and other interested persons. The initial mailing will go to about 1,200 persons.

Integration of the USOE Cost and Funding Study with other network design activities continued during the quarter. Several questions prompted by need for network planning data, in the area of automated and supplier support for technical processing and the current pattern of interlibrary loan activity, are being included in the survey of 100 libraries to be conducted during the Cost and Funding Study. A draft set of survey forms was pretested in Idaho during the quarter. Appendix D contains a summary of Cost and Funding Study activities.

I. Presentations and Publications During the Quarter

No presentations were made during the quarter. A news release (see Appendix A) was prepared and distributed to regional and national publications dealing with libraries, information science, and higher education.

Although not published until mid-January 1976, the project staff designed a logo and layout for a Western Network Newsletter (Appendix F). The Newsletter will be the primary medium for keeping librarians in the West and other persons concerned with libraries and networking informed about project activities. It will be published irregularly, with probably six to eight issues during 1976. An International Standard Serials Number (ISSN) was procured from the Library of Congress for the publication to demonstrate our intention to follow standards in furtherance of cooperation and coordination with other networks. A publication summarizing our review of potential components for a western bibliographic network, designated as Product 3 in the CLR grant proposal, was scheduled for production in December. We decided to delay publication until January to tailor the document to serve as background information for members of the Steering Committee for their study prior to the committee meeting scheduled for 2-3 February 1976. A draft of the report, entitled "A Review of Potential Components for a Western Bibliographic Network" (N-11), was published on 21 January 1976.

IV. PLANS FOR THE NEXT QUARTER

Steering Committee Meeting and Network Organization

During the month of January, 1976, the Project Staff will continue to prepare for the meeting of the Network Steering Committee in Boise, Idaho,

15

on 2-3 February. The objective of this meeting is to obtain policy guidance and a charge to proceed with drawing up a charter and bylaws for a formal network organization. An Executive Board of five Steering Committee members is to be selected to provide a capability for fast decision-making during the period required to set up a formal organization.

Following the meeting of the Steering Committee, we will set up two other major meetings. One will be for the purpose of exploring how service agencies such as BCR, PNBC, BALLOTS, WLN, and OCLC and the Library of Congress can work in concert to provide support to each other and to western libraries; one subject for discussion will be a proposal for the interconnection of the computer utilities. The second meeting will bring together the major network organizations operating in or on the borders of the western region, and will include PNBC, BCR, and WLN in their network (as opposed to service supplier) role as well as CLASS, Amigos, MIDLNET, and the Regional Medical Libraries.

From these various meetings we expect to obtain the information and approvals necessary for developing a draft plan for the governance and structure of a Western Network. This plan, together with an analysis of alternative legal bases for the Network, will be presented to the Executive Board for review, approval, and a charge to proceed with implementation.

Pilot Projects

By 13 February 1976, the Project staff will prepare a preliminary draft for discussion for a contract for providing access to WLN by Billings Public and Eastern Montana State. We will also continue to analyze the technical requirements for providing such service in order that, when the contract is ready for signature, we are ready to obtain the equipment and communications service necessary and can prepare for training the library staffs involved.

We will conduct a survey of major union serials data bases in the West both to develop an inventory for future use in library cooperation and to identify a data base that would be best suited for use as a foundation on which the Union List of Montana Serials could be built quickly and economically, as well as being fitted for future maintenance and integration with CONSER records and union lists of other states.

The connection between the Nevada State Processing Center and BALLOTS will be explored to determine the details of how the Network might be of assistance.

V.   FINANCIAL REPORT SUMMARY

Expenditures for the quarter were approximately the amount planned. The detailed financial report is contained in Appendix E.

<div align="center">16</div>

APPENDICES TABLE OF CONTENTS

17

APPENDIX A

<u>PRESS RELEASE</u>

<u>ANNOUNCING ACQUISITION OF DESIGN CORE STAFF</u>

Contact: Gerald S. Volgenau

ANYTIME RELEASE

The Western Interstate Commission for Higher Education (WICHE) has
secured grants and hired staff to design and develop a regional bibliographic
network and to perform associated cost and funding studies for libraries in
17 western states and British Columbia.

This western network will link to and cooperate with other emerging
regional and national library and information networks.

The name of WICHE's new project is the Western Bibliographic Network.
It is part of WICHE's on-going Program on Continuing Education and Library
Resources, directed by Maryann Duggan.

The goals of the fledgling Western Bibliographic Network will be to
extend computer-supported services to libraries throughout the region and to
increase equitable access to all of the West's library holdings for better
service to individual patrons.

(MORE)

19

The project's new director is Eleanor A. Montague, a nationally-known librarian who was formerly assistant manager, Project Ballots, Stanford Center for Information Processing, Stanford University. Ms. Montague, who holds masters degrees in Librarianship (University of Chicago) and Business Administration (University of Santa Clara), was a member of the original technical task force that launched the effort to develop the Western Bibliographic Network.

Other members of the new staff are Karl M. Pearson, Jr., a researcher and developer of computer-based library service, formerly with the Education and Library Systems Department, System Development Corporation, who holds the position of systems analyst; Maryann Kevin Brown a library cost analyst, formerly with Westat, Inc., Rockville, Maryland, who holds the position of analyst for cost and funding studies for the Network; and Anita L. McHugh, who holds the position of research assistant. Louise T. Martin is the project secretary.

The Network staff has already launched a number of activities. It is setting up demonstration projects for computer-based resource-sharing services between Nevada and California and between Montana and Washington. Staff has begun a study of telecommunications requirements for libraries in the region and has reviewed organizations and systems that might be involved in the Network. Also, the Network team is conducting pretests of costing study forms in Idaho, at the invitation of Helen Miller, state librarian.

Design and development of the Western Bibliographic Network are supported by two separate grants.

The Council on Library Resources (CLR) has awarded a $79,325 one-year grant to support the overall design of the Network, which will be compatible with other developing bibliographic systems and with an evolving national system.

20

(MORE)

The U.S. Office of Education has awarded a grant totaling $65,135 to support the cost and funding studies associated with the creation of the new network. Among other things, these studies will determine and then compare present costs of library services without network support to projected costs for the same services with the network.

Additional financial support for the Network amounting to $32,744 has been provided by eleven western state library agencies. These dollars constitute matching funds for the grant support.

The 17 states in the region covered by the Western Bibliographic Network are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming; plus the Canadian province of British Columbia.

Policy decisions for the Network will be formulated by a 20-member Steering Committee. In-state coordination will be performed by State Design Teams of five or more librarians in each state.

Overall guidance for the Project will be provided by the Western Council on Continuing Education and Library Resources composed of the 11 state librarians that fund the program of which the network project is a part.

The Continuing Education and Library Resources Program is one of 50 separate programs conducted by the Western Interstate Commission for Higher Education. WICHE programming covers a broad range of fields including higher education, health, mental health, corrections, and management information systems in postsecondary education.

WICHE is a public agency which helps the 13 western states work together to increase educational opportunities for Westerners, to improve programs of universities and colleges, to expand the supply of specialized manpower, and to inform the public of higher education needs.

APPENDIX B

TABULATION OF SURVEY OF WESTERN LIBRARIES

HAVING CLSI SYSTEMS

SUMMARY OF SURVEY

OF WESTERN LIBRARIES

HAVING A LIBS 100 CIRCULATION CONTROL SYSTEM

In November, 1975, the Project staff mailed a questionnaire to 11 western libraries having a Computer Library Services, Inc., (CLSI) turnkey circulation control system, the LIBS 100. The main purpose of the survey was to determine how many of these libraries were generating inventory control files that could be linked via Library of Congress card number (LCCN) or International Standard Book Number (ISBN) to catalog records in a regional bibliographic base or that could be merged with data from other libraries to create cheaply a numeric register of holdings.

Two libraries did not respond to the survey. Of the nine respondents, all but one is a city or county public library; the other is an academic library. Questionnaires were mailed on 18 November and the last reply was received 16 December 1975. One or two of the respondents were in the process of building their circulation control title file and were not yet operational using the system.

Because of the great differences in the data provided by the respondents, the survey results have simply been tabluated, as displayed in the attached table. It is a little disappointing that some libraries are not recording the LCCN, which would provide a common access point to their holdings. No libraries appear to be including serials in their circulation title file. All the libraries but one keyboarded most or all of their own data to create and maintain the title file rather than obtaining machine-readable records from an existing file.

	Libraries								
	A	B	C	D	E	F	G	H	I
# of Terminals	3	15	15	8	2	8	16	5	4
# of Titles (ooo's)	360	119	105	116	82	280	160	40	49
# of Volumes (ooo's)	385	225	170	139	127	?	700	73	56
Data Elements Included:									
LC card #	0%	25%	50%	70%	40%	1%*	0%	70%	0%
Local call #	100%	100%	100%	100%	100%	100%	100%**	75%	100%
Year published	0%	99%	99%	90%	100%	90%	98%	98%	10%
Edition	no	yes	yes	yes	no	yes	no	yes	yes
Materials Included:									
Books (hardcover)	yes	yes	yes	yes	yes	yes	yes	yes	yes
Paperbacks	no	yes	yes	yes	yes	no	no	no	no
Periodicals	no	no	yes	no	no	no	no	yes	yes
Records/cassettes	no	yes	yes	yes	yes	yes	yes	yes	yes
Prints/pictures	no	no	no	yes	yes	yes	no	yes	no
Framed Art	no	no	yes	yes	no	no	no	no	no
Pamphlets	no	no	no	no	yes	no	no	yes	no
Audio-visual kits	no	no	no	no	yes	no	no	no	no
Films	no	no	no	no	yes	no	no	yes	no
Music scores	no	no	no	yes	no	no	no	no	no
Games	no	no	no	no	no	no	no	yes	no
Maps	no	no	no	no	yes	no	no	no	no
Titles Added/wk	600	150	2000	1100	1230	N/A	250	1200	375
Copies Added/wk	?	450	3500	1150	1933	"	2000	2000	475
Records Changed/wk	200	75	?	10	10	"	?	20	?
Copies Deleted/wk	?	40	few	10	10	"	250	25	?
Titles Deleted/wk	?	15	few	5	?	"	10	2	?

*   LC card number is being included for all new records.
** Non-fiction only.

24

APPENDIX C

STEERING COMMITTEE APPOINTEES, LETTER OF INVITATION,
AND TENTATIVE AGENDA FOR MEETING

STEERING COMMITTEE APPOINTEES

Academic

Mr. Roger Hanson
Director of Libraries
Marriott Library
University of Utah
Salt Lake City UT 84112

Mr. Basil Stuart-Stubbs,
Librarian
University of British Columbia
V6T 1W5 Vancouver, B.C.
CANADA

Mr. K. L. Janecek, Director
North Dakota State University
   Library
Fargo ND 58102

Mr. Kenneth S. Allen
Associate Director of Libraries
University of Washington FM-25
Seattle, WA 98195

Mr. David Weber
Director of University Libraries
Stanford University
Stanford CA 94305

Mr. H. Theodore Ryberg
Director of Libraries
Elmer E. Rasmuson Library
University of Alaska
Fairbanks AK 99701

Mr. G. A. Rudolph
University of Nebraska
Don L. Love Memorial Library
Lincoln NB 68508

Mr. Norman Alexander
Chairman, Library Council
State System of Higher Education
Southern Oregon State College Library
125D Siskiyou Boulevard
Ashland OR 97520

State and Public Libraries

Mr. Roderick Swartz
State Librarian
Washington State Library
Olympia, WA 98501

Mr. Joseph J. Anderson
State Librarian
Nevada State Library
Carson City NV 89701

Mr. C. Edwin Dowlin
State Librarian
New Mexico State Library
P. O. Box 1629
Santa Fe NM 87501

Mr. James Burghardt, Librarian
Multnomah County Library
801 SW 10th St.
Portland OR 97205

Mr. H. Vince Anderson, Director
South Dakota State Library Commission
322 South Fort Street
Pierre SD 57501

Mr. William H. Williams,
State Librarian
Supreme Court & State Library Bldg.
Cheyenne WY 82001

Miss Helen M. Miller, State Librarian
Idaho State Library
325 W. State Street
Boise ID 83702

Mr. Richard J. Neuman
Salina Public Library
301 W. Elm Street, Box 119
Salina KS 67401

STEERING COMMITTEE APPOINTEES

Other

Dr. Joanne E. Arnold,
Acting Associate Vice-Chancellor for
  Faculty & Staff Affairs
University of Colorado
815 Park Lane
Boulder   CO   80302

Mr. Ernest W. Hartung,
President
University of Idaho
Moscow   ID   83843

Ms. Margaret Warden
208 Third Ave. North
Great Falls   MT   59401

Ms. Edythe Moore,
Aerospace Corporation
Charles C. Lauritsen Library
P. O. Box 92957
Los Angeles   CA   90009

Mrs. Jack Taylor
38 N. Fraser Drive
Mesa   AZ   85201

28

P. O. Drawer P. Boulder. Colorado 80302 • (303) 449-3333

WICHE

Western Interstate Commission for Higher Education

an equal opportunity employer

Dear

      I am writing to ask you to serve on the Steering Committee for the Western Interstate Bibliographic Network Project being conducted under the WICHE Continuing Education and Library Resources Program. The network project is being funded by the Council on Library Resources (CLR), the U.S. Office of Education, and ten state library agencies.

      The purpose of the Network Steering Committee is to oversee and coordinate network activities during the grant period (funded through 6/76 with a probable no cost extension to 9/76). The Steering Committee will have the responsibility to review and approve the broad range of network design activities presented by the Western Network staff and to establish policy and directions. Work on governance structure and funding alternatives for the emerging western network will be a primary task of the Steering Committee.

      The Steering Committee is composed of 21 members selected to represent a cross section of organizations concerned with improved sharing of library resources in the West. The selection of the Steering Committee has been done in such a way that each of the 17 participating western states and British Columbia will have at least one representative. A list of appointees is attached.

      The Steering Committee will meet at least two times during the grant period; travel expenses will be paid by the Project. The first meeting is scheduled from 1:00 P.M. on February 2 through 12:00 noon on February 3, 1976, in Boise, Idaho at the Rodeway Inn. The place and date of subsequent meetings can be set by the Committee at the Boise meeting.

29

According to the proposal, the Steering Committee is expected to choose from among its members an Executive Board of five persons to meet as required during the grant period. The Executive Board will represent the Steering Committee and will work closely with the Western Network staff and report back to the Steering Committee for endorsement and evaluation of design developments.

Please direct any questions you may have to Eleanor Montague, Project Director, Western Bibliographic Network Project at (303) 492-8150. A reservation card from the Rodeway Inn is enclosed and should be returned to them as soon as possible. A detailed agenda and more information on the meeting will be sent next week.

Copies of the First Quarterly Report of the CLR Network and the U.S. Office of Education Cost and Funding Study Project are enclosed.

Sincerely,

Robert H. Kroepsch
Executive Director

RHK:lm
Encls.

WESTERN NETWORK

ORGAN'ZING STEERING COMMITTEE

February 2 - 3, 1976

AGENDA

Monday, February 2, 1976

1:00-1:30 P.M.   Welcome; introduction; agenda review

1:30-3:00 P.M.   Orientation and project status

3:00-3:15 P.M.   Coffee

3:15-4:00 P.M.   National Commission of Libraries & Information Science
                     (NCLIS) - an update

4:00-5:00 P.M.   Issues facing the Steering Committee; Nominating Committee

5:00-6:00 P.M.   Reception; Nominating Committee meeting

6:00-7:30 P.m.   Dinner meeting

8:00-8:15 P.M.   Report of the Nominating Committee

8:15-9:30 P.M.   Report on the MIDLNET network

Tuesday, February 3, 1976

7:30-8:30 A.M.   Breakfast meeting of Executive Committee

8:30-10:30 A.M.   Legal and organizational alternatives for the Western Network

10:30-11:30 A.M.   Proposed implementation strategies and schedules

11:30-12:00 P.M.   Summary; identification of action items; schedules

Organizing Steering Committee Chairman: Dr. Ernest W. Hartung, President
                                          University of Idaho

Resource People:

Dr. Kevin Bunnell. Director   Eleanor A. Montague. Project Director
Division of General Regional Programs   Western Network Project
WICHE   WICHE

Maryann Duggan, Program Director   Karl M. Pearson, Jr., Systems Analyst
Continuing Education & Library   Western Network Project
  Resources Program   WICHE
WICHE

                                         Alphonse F. Trezza, Executive Director
T. John Metz, Executive Director   National Commission of Libraries &
MIDLNET   31   Information Science (NCLIS)

APPENDIX D

USOE COST AND FUNDING STUDY SUMMARY

SUMMARY OF THE COST AND FUNDING STUDIES

BEING CONDUCTED FOR THE DEVELOPMENT AND IMPLEMENTATION OF A

WESTERN INTERSTATE BIBLIOGRAPHIC NETWORK

Under a grant from the U. S. Office of Education (USOE), the WICHE
Continuing Education and Library Resources Program is conducting cost and
funding studies to support the development and implementation of a Western
Interstate Bibliographic Network. These studies are being performed in
conjunction with the network design and development project funded by the
Council on Library Resources (CLR) and the Western Council. The USOE
grant, for a one year period, was officially awarded July 1, 1975.

The cost and funding studies have four primary goals; each is
described in the following section:

I.   To determine representative costs of present library
     services without network support;

II. To estimate future costs of library services at various
     levels of proposed network support;

III. To evaluate and compare the impact of a network upon
     costs of library services; and

ˉV. To examine and recommend equitable programs of financial
     support for an interstate bibliographic network in the West.

I.   DETERMINE REPRESENTATIVE COSTS

For the purposes of the cost study, we are focusing our attention on
those library activities that are most likely to be affected by the presence
of a regional network. Thus, the study will examine costs in the technical
processing, interlibrary loan, and administration areas of library operations.

Cost data will be collected from 100 academic and public libraries in
the region. We will use a stratified random sample (outlined in attachment A)
recommended by the study's consultant, Vernon E. Palmour, who has designed a
number of major library cost studies. The data will be collected by means
of a questionnaire survey. Twelve libraries in the sample will be asked to
participate in a more extensive data collection effort to obtain detailed
costs for the various subtasks involved in each major operational activity.

The surveys will collect basic data on collection size, volume of
activity ("throughput") in technical processing and interlibrary loan, and

budget allocations. Detailed data will be collected on the following cost
elements in technical processing and interlibrary loan, and budget allocations.

a. Direct Labor. Data to be collected include number and level of
staff (expressed in FTE), salaries, and fringe benefits. Because
network products and services might occasion a change in the mix
of staff assigned to various activities, staffing data will be
broken down into the levels of professional, paraprofessional,
clerical, and student assistant. In addition, technical processing
will be subdivided into activity categories related to acquisitions,
cataloging, serials, bindings, etc.

b. Administrative and Supervisory Labor. This cost element includes
the planning, budgeting, controlling activities required for the
management of the library as a whole, as well as the direct
supervision of technical processing and interlibrary loan by
departmental supervisors (where appropriate). The presence of a
network may affect the amount and kind of "administrative and
supervisory overhead" required for these activities, both directly
because of changes in the staffing mix and indirectly because of
effort applied to relating the library as a whole to the network
mode of operation.

c. Support Services. This cost element includes resources allocated
to procuring services and products that increase staff productivity
or that improve efficiency or effectiveness. Support services may
be purchased from out-of-library suppliers or may be obtained
through operation of an in-library automated system. The sample of
libraries surveyed is likely to include some that already use some
of the products and services that a network might provide, and
thus it is important in analyzing the collected data to be able to
determine the degree to which a respondent is already operating in a
network mode.

d. Telecommunications. This element includes costs for telephone,
TWX, telex, facsimile, and similar telecommunications services used

by a library for message transmission, data transmission, and interaction with other libraries, vendors, data base systems, and so on, in connection with technical processing and interlibrary loan. A network is likely to foster increased use of telecommunications for interlibrary communication and for access to computer-based bibliographic services.

e. Equipment. Equipment costs must be segregated according to the likely effect of network operations on them. We see three categories of equipment cost. The first category consists of equipment costs that are directly related to production, such as files, duplicating machines, teletype terminals, etc. The second category consists of equipment costs directly related to staff size, such as furniture and typewriters. The third category contains costs for equipment that is related to the operation of the library as a whole or is not related to production or staffing, and is unlikely to be affected by any networking activity.

f. Supplies. This cost element includes the stock of items (other than equipment) used to maintain normal operations, support routines, etc. (e.g., paper supplies, card stock, forms, pencils, pens, etc.). Supplies, like equipment, must be categorized according to the likely effect of network operations. There is a supply cost directly related to the size of staff that will fluctuate according to the impact of a network on staff size. Certain other supplies are related to production. There is also a core supply expense which will remain unaffected by network support.

Further refinement of these broad cost elements will be achieved through the detailed case studies of twelve libraries subjectively selected from the sample of 100 libraries. Within these case studies, additional cost elements will be required to delineate "real" costs:

g. Facility overhead. This includes building investment, depreciation, rental, maintenance, utilities and space allocation to those task areas being studied.

h. Equipment overhead. This includes an accounting of the costs for

equipment owned, date of purchase, depreciation, and
allocation to those task areas being studied.

i. Detailed administrative overhead. This includes a rigorous
    examination of the administrative structure and cost of
    activities directly related to technical processing and
    interlibrary loan.

In the twelve case studies, individual subtask activities will be surveyed
for a period of three weeks to capture unit time and processing cost data. This
study will provide a detailed accounting of staff time, by level of staff, and
the corresponding direct costs, for specific subtasks within technical process-
ing and interlibrary loan. Having these data in hand, it will be possible to
evaluate the cost impact of network activities, products and services that
alter or replace current subtasks.

The data collection instruments developed for this cost study will be
available for the use of any library wishing to use them as tools in their
own evaluation of internal operations.

In addition to the cost data collected from libraries, the study will also
collect data from three major bibliographic centers in the west: the
Bibliographic Center for Research in Denver; the Pacific Northwest Bibliographic
Center in Seattle; and the California State Library Union Catalog. This
portion of the study will focus on the costs associated with maintaining the
union catalogs at the centers and with providing location and interlibrary
loan services to member libraries. Data on the characteristics and patterns
of interlibrary loan and location transactions will also be collected.

II. ESTIMATE FUTURE COSTS

Estimating future costs requires the examination of costs at two
levels -- the network level and the individual library level. Services
defined and specified for the Western Network will be used as the base
for predicting network costs. This analysis may require use of a complex
predictive model with several iterations contingent on alternative network
designs, varying levels of expected participation, and the array of network
services offered. Because network services are likely to be based on
available automated services, such as BALLOTS, the Washington Library Net-
work, and the Ohio College Library Center, costs to member of the network

will reflect the corresponding priciou structures. Both the initial invest-
ment costs and the operating costs as incurred by the individual library are
to be examined. Initial investment costs to be explored include:

* development and design of the system components
  (if required);
* profiling and programming the requirements of network
  members;
* conversion of manual files of network members to
  system files;
* equipment and equipment installation;
* communication links; and
* training of member library personnel in system use.

Operating costs are defined to be those costs incurred for the normal
operations of the system and system use. These costs include:

* data base building, updating, storage, and maintenance;
* product and service charges, membership fees, etc.
* equipment rental and maintenance;
* updating network member profiles and programs;
* supplies;
* telecommunications;
* network support and consulting;
* system maintenance.

From this compilation anticipated costs to an individual library for network
services can be predicted. Additionally, network operating costs as a
function of service volume and options can be estimated. Thus, the total
funding requirements necessary to support the network can be predicted.

III. EVALUATE NETWORK IMPACT ON COSTS

     After ascertaining present library costs in technical processing and
interlibrary loan without network support, and expected future costs with a
network (Phases I and II), these costs will be compared (Phase III). The
library cost data for current activity as collected and analyzed during the
first phase of this project represents the base from which extrapolations will
be made. Identification of activities (and their corresponding costs)
affected by network support (along with the manner in which they will be
affected) allows for the estimation of cost changes introduced by replace-
ment or adaptation of these activities by network services. Network costs
and "new" activity costs will be substituted for replaced activity costs,
and thus, a predictive model of the cost impact of network participation
upon an individual library can be formulated. To insure the viability of
such a predictor, the model will account for varying levels of network partici-

37

pation and service. Results of similar studies concerning the introduction
of support systems to library technical processing and interlibrary loan
will be employed to refine and validate these cost-impact estimates.

IV. RECOMMEND FUNDING STRATEGY

The most significant objective of these studies is to determine a
funding strategy for a proposed network. Initial investigation into funding
will include examination of existing network funding strategies, as well as
public policy and legal issues as they affect funding. After formulating a
wide spectrum of alternatives, and defining possible membership groups,
funding strategies will be analyzed in light of the results of the cost
studies, particularly the estimate of network funding requirements developed
in phase II. Additionally, the types of network membership (e.g., state,
multi-county, individual library, etc.) options and scaling of membership
fees will be considered. Further the network cost impact developed in
Phase III will be considered in determining the desirability of a membership
fee graduated according to type and size of library and in relation to the
cost-savings or cost-benefits associated with network services to each group.
In this manner, equitable membership fees can be calculated. Such an
approach to funding will yield a set of optimal strategies upon which viable
and equitable funding decisions can be made.

The scope and depth of these studies suggest they may be potential
contributions to methodology, modeling and evaluation of library costs.
Indeed, beyond the specific purpose these studies serve in the development
of the Western Network, these studies will be of substantial value to future
research in library services.

The progress of these studies will be reported in the Western Network
Newsletter. Additionally, further detail on the study can be found in the
quarterly reports for this project, released in October, 1975 and February
and April, 1976. The final report will be available in September, 1976.
For further information regarding these cost and funding studies, please
contact:

Maryann K. Brown,
Cost and Funding Investigator
WICHE, P. O. Drawer P
Boulder, Colorado 80302
(303) 492-8188

ATTACHMENT A

OUTLINE OF THE SAMPLE DESIGN TO BE USED IN THE SURVEY FOR THE COST AND
FUNDING STUDIES OF THE PROPOSED WESTERN INTERSTATE BIBLIOGRAPHIC NETWORK

The sample proposed for the survey of present library costs in 100
libraries in the 17 western states and British Columbia includes academic,
public and state libraries. Considerable study was given to the possible
inclusion of special libraries and school libraries. These libraries repre-
sent an essential resource in any western network and, clearly, must be
included in network planning. However, an adequate examination into the
technical processes and interlibrary loan services of these groups requires
an entirely different type of study approach to account for the varying
procedures, purposes and requirements of these libraries. This unique study
does not fall under the charge of this grant, but should be given considera-
tion for future study.

The sample was designed to allow the collection of a great amount of
data concerning costs and interlibrary loan traffic via a survey instrument.
Larger libraries, both academic and public, represent a major portion of
those costs as well as interlibrary loan transactions to which this study
is directed. Consequently the sample is weighted towards the inclusion
of the larger institutions. Additionally, regional systems were singled out
as a valuable source of interlibrary loan data. For these reasons the strata
follow these guidelines:

Academic Library: A library which serves a four-year university
or college or a two-year junior college or community college which
meets the criteria for listing in the Higher Education Directory
1974-75; exluding, however, institutions which are for-profit,
trade schools, exclusively graduate education, or highly specialized
institutions such as seminaries, industrial schools, etc.

Large Academic Library: Institutions meeting the criteria indi-
cated under academic and whose holdings exceed 920,000 volumes.

Other Academic Library: Institutions meeting the criteria indi-
cated under academic and whose holdings do not exceed 920,000
volumes.

Public Library: A library that serves free all residents of a
community, district or region, and receives its financial support,
in whole or in part, from public funds.

39

ATTACHMENT A (cont.)

Large Public Library: A public library, according to the above
classification, which is among the larges ten libraries in the
western 17 states and British Columbia. This is contingent upon
willingness to participate in the survey.

Other Regional Headquarters: A public library serving, or
housing a center which serves, a group of communities, or several
counties, and supported in whole or in part by public funds from
the governmental units served; excluding those which are con-
sidered a part of the "large public" stratum.

Other Public Library: A public library whi... does not fall under
the definition of a large public or regional headquarters library.

State Library: A library maintained by state funds for the use of state
officials, and sometimes for the use of all citizens of the state.

The following table displays the number of libraries within each stratum
to be included in the survey and in the case studies.

Stratum	Number in sample	Number of Case Studies (also part of sample)
Academic Libraries		
Large	19	2
Other	26	3
Total	45	5
Public Libraries (38)		
Large	10	2
Other Regional Headquarters	18	2
Other	10	1
Total	38	5
State Libraries	17	2
Sample Total:	100	Case Study Total: 12

40

APPENDIX E

FINANCIAL REPORT

41

COUNCIL ON LIBRARY RESOURCES

One DuPont Circle • Washington, D.C. • .0036   Tel 202 2.6 47. /

FINANCIAL REPORT

(The Council requires *official* accounting and the signature of the responsible financial officer)

CLR No. __614__

Name and address of submitting institution __WICHE__

__P. O. Drawer "P" - Boulder, Colorado 80302__

Submitted by: _(Signature of responsible financial officer)_   John Staley, Assoc. Director, WICHE
(Name & Title – Please type)

Title of Project: __Western Interstate Bibliographic Network__

Nature of Report: Interim ☒   Final ☐   (Please check one)

Starting date of Project __July 1, 1975__   Period covered by this Report __Oct. 1 - Dec. 31, 1975__

EXPENSE ITEMS	Total Approved Budget (1)	Expenditures Since Last Report (2)	Total Expenditures to Date (3)	Balance Available (Col. 1 - Col. 3) (4)
A. Salaries, wages. & employee benefits	60,785.00	12,535.48	15,999.23	44,785.77
B. Consultant fees	1,000.00	471.00	546.00	454.00
C. Travel	12,750.00	2,673.41	4,649.08	8,100.92
D. Supplies & materials	-0-	-0-	-0-	-0-
E. Printing & duplication	-0-	-0-	-0-	-0-
F. Equipment	750.00	107.40	126.17	623.83
G. Other Costs	4,040.00	873.06	1,040.45	2,999.55
TOTAL COSTS	79,325.00	16,660.35	22,360.93	56,964.07

Total Grant __79,325.00__ less receipts to date __35,000.00__ balance available __44,325.00__

FINANCIAL REPORT INSTRUCTIONS

1 Expense items

A Salaries, wages, & employee benefits – List names, and all position titles such as project director, research assistant, secretary, etc. State percent of time spent on the project, per annum salary, with beginning and, if applicable, ending dates of employment for each. Identify other jobs performed on a wage basis, i.e., per hour and rate, with beginning and, if applicable, ending dates of employment for each. Itemize benefits such as Social Security, retirement, hospitalization, etc.

B. Consultant fees – Show names, rate, and number of days.

C Travel   For each trip by staff members or by consultants, explain the purpose of the travel, and include applicable cost information for both transportation and living expenses. Commercial Travel will be reimbursed at the economy rate.

D. - G. - Provide an explanation and computation for each item.

2. Reallocations or revisions of items in the budget upon which the grant is based must be approved in advance by the Council.

SUMMARY OF BUDGET AND EXPENDITURES FOR OCTOBER 1, 1975 - DECEMBER 31, 1975

ITEM	ALLOCATION	EXPENDITURES TO DATE	OCT. EXPENDITURES	NOV. EXPENDITURES	DEC. EXPENDITURES	EXPENDITURES OCT-DEC	TOTAL EXPENDITURES	BALANCE
01 Salaries-Exempt	$45,726.00	$2,702.54	$2,570.82	$2,570.82	$4,254.15	$9,395.79	$12,098.33	$33,627.67
02 Salaries-Non Ex	7,170.00	345.50	452.58	569.00	569.00	1,590.58	1,936.08	5,233.92
04 Contract Hrly	-	-	-	-	-	-	-	-
06 Benefits-Exempt *	7,889.00	415.71	434.29	439.58	675.24	1,549.11	1,964.82	5,924.18
16 Benefits-Non-E *	-	-	-	-	-	-	-	-
26 Intern Stipend	-	-	-	-	-	-	-	-
27 Consultant Fee	1,000.00	75.00	171.00	300.00	-	471.00	546.00	454.00
28 Subcontracts	-	-	-	-	-	-	-	-
29 Data P.ocessing	500.00	-	-	-	-	-	-	500.00
30 Travel-Staff	3,000.00	-	369.51	1,499.87	804.03	2,673.41	2,673.41	326.59
31 Travel-Relocate	-	-	-	-	-	-	-	-
32 Travel-Consult	750.00	87.28	-	-	-	-	87.28	662.72
33 Travel-Other	9,000.00	1,888.39	-	-	-	-	1,888.39	7,111.61
34 Travel-Trainee	-	-	-	-	-	-	-	-
45 Publications	2,000.00	-	-	-	-	-	-	2,000.00
53 Office Rent	1,800.00	167.39	167.39	167.39	167.22	502.00	669.39	1,130.61
54 Phone Equip	540.00	-	119.94	60.01	54.05	234.00	234.00	306.00
55 Phone Toll	1,200.00	-	-	-	137.06	137.06	137.06	1,062.94
58 Postage	800.00	2.40	2.57	5.13	24.67	32.37	34.77	765.23
60 Meeting Exp	-	-	-	52.74	-	52.74	52.74	(52.74)
61 Office Supplies	1,200.00	179.96	107.23	81.40	120.44	309.07	489.03	710.97
64 Copying	2,000.00	112.05	106.47	33.05	180.04	319.56	431.61	1,568.39
65 Other Exp	750.00	304.63	71.43	141.50	(185.49)	27.44	332.07	417.93
66 Train Matrls	2,000.00	-	-	-	-	-	-	2,000.00
77 Equip Purchase	-	-	-	-	-	-	-	-
TOTAL DIRECT COSTS	87,325.00	6,280.85	4,573.23	5,920.49	6,800.41	17,294.13	23,574.98	63,750.02
99 Indirect Costs	20,483.00	723.00	1,089.00	1,169.00	1,169.00	3,427.00	4,150.00	16,333.00
GRANT TOTAL	107,808.00	7,003.85	5,662.23	7,089.49	7,969.41	20,721.13	27,724.98	80,083.02

* Line Item 06 & 16 have been combined into 07 - Staff Benefits

43

A. <u>Salaries, Wages, and Employee Benefits</u>   <u>Second Quarter</u>

Miss Maryann Duggan, Program Director   (25% on project at annual salary of $25,404. $1,587.75
                                          Project start date 7/1/75)

Karl Pearson, Systems Analyst   (100% on project at annual salary of $24,500. Work   6,124.71
                                          on project began 9/15/75)

Eleanor Montague, Project Director   (100% on project at annual salary of $26,000. Work   1,683.33
                                          on project began 12/8/75)

Louise Martin, Project Secretary   (100% on project at annual salary of $6,828. Work   1,590.58
                                          on project began 10/20/75)

                                                                              TOTAL $10,986.37

<u>Employee Benefits</u> (total for all exempt and non-exempt)   1,549.11

                                        TOTAL SALARIES, WAGES & EMPLOYEE BENEFITS $12,535.48

B. <u>Consultant Fees</u>

Rebuldela, Harriet K.   (To plan, organize, and present a one-day conference on $ 171.00
                          Library Networking in the West, MPLA-CLA Conference,
                          Denver, Colorado, October 19, 1975)

Montague, Eleanor   (To consult with Continuing Education and Library Resources   300.00
                          Program on CLR Network Design Grant and USOE Cost and
                          Funding Grant, specifically to provide guidance in task
                          identification, scheduling, technical interfacing, and
                          network modeling, November 12,13,14,17)

                                        TOTAL CONSULTANT FEES $ 471.00

C. Travel

Inclusive Dates	Person, Destination, City, and Institution	Purpose	Transp.	Living.	Total
* 9/14-17	Maryann Duqqan from Boulder to Wash., D.C.	Conduct Cost & Funding Planning Session	$ 89.06	$ 83.69	$172.75
** 9/17-19	Karl M. Pearson from Boulder to Wash., D.C.	Conduct liaison with Assoc. of Research Libraries and MARC Development Office of Library of Congress; plan USOE Cost & Funding Study	135.66	61.10	196.76
10/1-15	Karl Pearson from Boulder to San Francisco, Los Angeles, Calif.	Conduct site visits to review possible network components	400.08	268.06	668.14
10/24-11/3	Karl Pearson from Boulder to Boston, Wellesley, Mass.	Attend ASIS Confr. in Boston, visit CLSI facilities and NELINET facilities,	294.74	520.04	814.78
11/16-18	Maryann Duggan fron Boulder to Reno, Nev.	Meet with Joe Anderson, Chmn. of Western Council to discuss project activities	90.73	31.93	122.66
10/19	Karl Pearson from Boulder to Denver	Attend CLA-MPLA Annual Meeting	-	16.25	16.25
*** 10/23-24	Maryann Duggan from Boulder to Salem, Oregon	Attend and participate in "Network Cooperation Conference" sponsored by Oregon State Lib.	62.43	7.36	69.79
12/8-17	Eleanor Montague from San Jose to Portland, Seattle, Salt Lake City, Provo, Billings, Denver	Visit with potential participants in Western Network	363.87	248.41	612.28
			1,436.57	1,236.84	2,673.41

47

48

* cost equally shared by Library Program Core budget, CLR, and USOE.
** cost equally shared by CLR and USOE.
*** 25% of cost, remaining charged to Core (65%) and USOE (10%).

D. Supplies and Materials	CLR	Matching Funds	Total
Postage	$ -o-	$ 32.37	$ 32.37
Office Supplies		205.32	205.32
Library Books and Materials		82.90	82.90
		320.59	320.59

E. Printing and Duplication

Copying		319.56	319.56
Publications		-	-

F. Equipment

Office Furniture Rental	$107.40	$	$107.40
Blackboard Purchase		40.00	40.00
Bulletin Board		40.00*	40.00
	107.40	80.00	187.40

G. Other Costs

Office Rent	$502.00		$502.00
Phone Equipment	234.00		234.00
Phone Toll	137.06		137.06
Business Cards		$ 9.95	9.95
Miscellaneous		13.80	13.80
Meeting Expenses		52.74	52.74
	$873.06	$ 76.49	$949.55
Reimbursement for item erroneously charged to this account (see First Quarterly Report).		$162.86	$162.86

* This item was erroneously charged to this grant.

APPENDIX F

WESTERN NETWORK NEWSLETTER, NO. 1

WESTERN NETWORK NEWSLETTER

Fifteen months ago, a group of 50 western librarians met in Denver
to talk about a western library network. After an arduous year of task
force meetings, proposal writing (and rewriting), and some finger-
crossing, a project to design and develop an interstate library network
(called the Western Network) has gotten underway. The purpose of this
Newsletter is to keep interested people informed on the progress of the
Western Network project, now being undertaken by the Western Interstate
Commission for Higher Education (WICHE).

BACKGROUND

The Western Network project is funded from three sources. The
Council on Library Resources (CLR) awarded a $79,325 one-year grant to
design, develop and secure sponsorship for a new interstate library
network organization serving the western states. The U.S. Office of
Education awarded a grant totalling $65,135 to conduct cost and funding
studies in support of network design. Both grants began July 1, 1975.
Additionally, the WICHE Continuing Education and Library Resources
Program Western Council (nine western state library agencies as of 1/1/76),
provide $32,744 in support of network design.

Seventeen states in the region are being invited to participate in
designing the network (a * indicates members of the Western Council):
*Alaska, *Arizona, *California, Colorado, Hawaii, *Idaho, Kansas,
*Montana, Nebraska, *Nevada, New Mexico, North Dakota, *Oregon, *South
Dakota, Utah, *Washington, and Wyoming; plus the Canadian province of
British Columbia.

The Western Network project is currently part of the Continuing
Education and Library Resources Program, one of 55 separate programs con-
ducted by WICHE. WICHE, formed by an interstate compact, helps 13 western
states work together to increase educational opportunities for Westerners,
to improve programs of universities and colleges, to expand the supply
of specialized personnel, and to inform the public of higher education
needs. The Western Network project has been authorized by the WICHE
Commissioners.

PROJECT STAFF

The Western Network Project staff consists of:

> Eleanor A. Montague, Project Director
> Karl M. Pearson, Jr., Systems Analyst
> Maryann Kevin Brown, Cost and Funding Analyst
> Anita McHugh, Research Assistant
> Louise T. Martin, Project Secretary

The Continuing Education and Library Resources Program staff consists of:

> Maryann Duggan, Director
> Sue Middleton, Program Secretary
> Ann Peckham, Secretary

This Program is part of the General Regional Programs Division of WICHE, headed by Dr. Kevin P. Bunnell.

NETWORK STEERING COMMITTEE

A major milestone for the Western Network project is the first meeting of the Steering Committee to be held in Boise, Idaho on February 2 and 3. This organizing Steering Committee will participate in and advise on planning for a western inter-state library network during the CLR grant period. The Steering Committee will have responsibility to review and approve the broad range of network planning and project design recommendations presented by the Western Network project staff and to establish policy and guidance for future development. Major decisions for the Committee will be in the areas of legal, organizational and funding alterna-tives for the emerging network, as well as implementation strategies to move to a permanent network organization serving the West.

An Executive Board of five members will be nominated from the Steering Committee. The Executive Board will represent the Steering Committee and will work closely with the Western Network project staff on network planning and design.

A summary of the Steering Committee meeting and future Western Network design activities will be included in the next issue of the Western Network Newsletter.

Steering Committee members are:

Norman D. Alexander
Chairman, Library Council
Oregon State System of Higher Education

Kenneth S. Allen
Associate Director of Libraries
University of Washington

Joseph J. Anderson
Nevada State Librarian

H. Vince Anderson, Director
South Dakota State Library Commission

Joanne E. Arnold
Acting Associate Vice-Chancellor for
  Faculty & Staff Affairs
University of Colorado - Boulder

James H. Burghardt, Librarian
Library Association of Portland

C. Edwin Dowlin
New Mexico State Librarian

Roger K. Hanson
Director of Libraries
University of Utah

Ernest W. Hartung, President
University of Idaho

K. L. Janecek, Director
North Dakota State University Library

Helen M. Miller
Idaho State Librarian

Edythe Moore, Librarian
Aerospace Corporation
Los Angeles, California

Richard J. Neuman, Librarian
Salina Public Library - Kansas

G. A. Rudolph, Dean of Libraries
University of Nebraska

H. Theodore Ryberg
Director of Libraries
University of Alaska

Basil Stuart-Stubbs
University Librarian
University of British Columbia

Roderick G. Swartz
Washington State Librarian

Eda Taylor
Public Library Trustee - Arizona

Margaret Warden
Montana State Senator

David C. Weber
Director of University Libraries
Stanford University

William H. Williams
Wyoming State Librarian

WESTERN NETWORK GOAL

The goal of the Western Network project is to plan for and develop an inter-state bibliographic network to serve libraries of all types in the western states and British Columbia. The aim of the Network is to integrate, strengthen and extend existing services and to move toward new services; the Network will not be competitive with cooperative activities, networks, or systems already at work in the area.

The project is guided formally by the Steering Committee and its Executive Board (described earlier) and the General Regional Programs Division of WICHE; suggestions and assistance from associations, institutions, libraries, and interested people throughout the West are welcomed.

Planning data to support network design is being gathered by the project staff. Under the USOE-sponsored Cost and Funding Project detailed cost studies will be conducted. Throughout the coming months, libraries in 17 states will be invited to participate in studies of technical processing costs, interlibrary loan transactions, and potential network services.

Specifically, the Western Network project can:

1. Plan the organizational, administrative, governance, and legal structure for a permanent network organization representing all types of libraries, and facilitate the transition to a permanent organization and Board of Directors.

2. Provide a mechanism to ensure that the concerns and requirements of the West are represented in national library planning and the development of the national network (see page xi, "Toward a National Program for Library and Information Services: Goals for Action," prepared by NCLIS, 1975). As part of this, the Western Network will work with the Library of Congress (LC) and other interstate networks to share resources, technology, bibliographic data, etc.

3. Provide a vehicle to attract grant funds to support on-going research and development for the benefit of the region. A plan for the technical inter-connection of western libraries and systems with LC and other major systems elsewhere in the country is a top priority.

4. Work with states, institutions, and associations in the West to develop interstate interlibrary loan protocols and an equitable funding structure to minimize uncompensated costs incurred by libraries that loan more items than they borrow.

5. Investigate and make recommendations for the development of a regional machine-readable bibliographic data base to improve resource sharing and to reduce technical processing costs.

6. Broker automated services from systems like The Ohio College Library Center (OCLC), The Washington Library Network (WLN), and BALLOTS

7. Identify and obtain network services needed by libraries of all types in the West.

8. Provide efficiencies and economies in training library staffs in utilizing network services effectively.

9. Study, recommend, and develop optimum telecommunication links; work with national organizations to improve telecommunication services and costs for libraries.

10. Develop cost and library processing analysis instruments that can be used by libraries for in-house studies

11. Perform statewide cost analyses to support network planning.

12. Provide access to expertise and information in the field of library automation and resource sharing.

13. Study, recommend and obtain improved mechanisms for material delivery.

What does this mean to the libraries of the West? Throughout this project, the goal of equitable and cost-effective access to better library service for all types of library users is top priority. Faster access to and delivery of resources, effective use of computer and telcommunication technologies, and sharing of exper-tise in a coordinated manner will benefit all.

If you would like information on the Western Network project or if you would like to be added to the Newsletter mailing list, please write or call:

Ms. Eleanor Montague, Director
Western Network Project
WICHE
P. O. Drawer "P"
Boulder, Colorado 80302
Phone: (303) 492-8150

WICHE CONTINUING EDUCATION AND LIBRARY RESOURCES PROGRAM

The WICHE Continuing Education and Library Resources Program, of which the Western Network project is a part, has one main goal: to assist in improving library services throughout the West by (1) providing continuing education opportunities for library staff and trustees and (2) stimulating the orderly sharing of and improved access to library resources among all types of libraries in the West. The basic Core program is funded by state library agencies in the West through membership in the Western Council. Special projects (approved by the Western Council and the WICHE Commissioners) are funded by external grants usually matched by Western Council funds. In addition to the Western Network project, the program has on-going continuing education activities. Forty-three librarians from 16 states are currently engaged in a year-long Institute on Library Staff Development. This Institute is funded by a USOE grant ($29,944) plus Western Council funds ($12,000) and support from participating libraries. Ms. Barbara Conroy is Institute Director. A manual of Staff Development Model P·,grams will be one of the products of this Institute.

Other continuing education activities consist of Workshops (Interpersonal Communication, Basic Reference Services, Management by Objectives, Interlibrary Loan Procedure) and Learning Kits (How to Hire a Librarian, Library Trusteeship, Training of Volunteers, and Government Documents). Special continuing education programs can be designed for any interested group of libraries on request. For additional information on the WICHE Continuiry Education and Library Resources Program, contact Maryann Duggan, (303) 4:2-7317.

W← WESTERN
   NETWORK

WICHE Rm 219
P.O. Drawer P,
Boulder, Colorado 80302

APPENDIX G

STATE TELECOMMUNICATIONS AGENCIES

P.O. Drawer P. Boulder. Colorado 80302 • (303) 492-7317

WICHE

Western Interstate Commission for Higher Education
────── An equal opportunity employer ──────

November 20, 1975

The following letter was sent to the State Librarians of Alaska, Arizona
Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico,
North Dakota, Oregon, South Dakota, Utah, and Wyoming.

We at WICHE are initiating the task for the Western Bibliographic Network
that calls for designing an interstate telecommunications system for library use.
As you know, libraries should be able to take full advantage of existing tele-
communications capabilities and facilities provided by the state governments.
It is even more important that the persons in each state who set telecommunications
policy and who plan for state telecommunications needs be made aware of library
requirements for effective, reliable, and economical transmission of biblio-
graphic data and messages among libraries within the state and between a
library and an out-of-state computer or bibliographic center.

We would appreciate your advising us if you have had any discussions
with your state's telecommunications policy makers, and if they are aware
of potential library uses of state telecommunications systems. If not, could
such discussions be arranged in the near future? We are interested in the
results of such discussions and welcome hearing from you. Would you also
identify for us the person in your state's government that we should talk with
(by prior arrangement with you) about library telecommunications requirements,
and could you give us this person's title, mailing address, and telephone
number? If there are any recent reports or other materials available on
library use of the state communications network, or plans for such use in the
future, we would greatly appreciate your sending us a copy. Karl Pearson, the
Network System Analyst, is in charge of the telecommunications study. His
phone number is (303) 492-7730.

One of the most significant contributions of a Western Bibliographic
Network is to help provide telecommunications capabilities that will allow
libraries to make cost-effective use of the various data bases and computer-
supported bibliographic systems now operational. We hope to gain some
advantages in this area for western libraries in the immediate future as
well as developing sophisticated capabilities for the long term.

Sincerely yours,

Maryann Duggan, Program Director
Continuing Education & Library
Resources

APPENDIX G

STATE TELECOMMUNICATIONS AGENCIES

From our contacts with the California and Washington State Libraries we learned that there is an active program for improving and extending telecommunications services for public agencies in those states. Such state government support for telecommunications would be very useful for Network operations, and so accordingly we queried the State Librarians in the other western states regarding the person in the government with responsibility for coordinating telecommunications requirements and policies. A copy of the letter to the State Librarians is attached.

In Arizona, no state office appears to have responsibility for telecommunications; the Corporation Commission was suggested as the agency closest to such services. Hawaii is charged international rates for telephone service to the mainland, and uses Datatel service for in-state library communication; a TYMNET node is being installed in Honolulu, evidently by a commercial firm. In Kansas, a Southwestern Bell representative was designated as the person to contact, although the Librarian also indicated that state telecommunications policymakers were aware of the TWX network used for interlibrary loan. Montana has an Administrator of the Communications Division who was most helpful when contacted in regard to providing a link between Montana libraries and WLN. New Mexico appears to have no state agency for communications other than for operating a Centrex office at the capitol. North Dakota operates a private teletype network for interlibrary communication, taking advantage of excess federal circuits made available to states; total annual cost per library is reported to be $750. In Oregon, there is a Data Systems Division that appears to have responsibility for telecommunications. South Dakota has a Director for State Telecommunications with whom the State Librarian has discussed library requiremnnts.

APPENDIX H

RECORD OF DISTRIBUTION OF THE REPORT

RECORD OF DISTRIBUTION OF THIS REPORT

Total Number of Copies Printed: 35

Council on Library Resources: (5)

Letters have been sent to the following people asking them if they want to receive copies. This is a departure from previous procedures.

Western Network Steering Committee   (21)

Norman D. Alexander, Oregon
Kenneth S. Allen, Washington
Joseph J. Anderson, Nevada
H. Vince Anderson, South Dakota
Joanne E. Arnold, Colorado
James H. Burghardt, Oregon
C. Edwin Dowlin, New Mexico
Roger K. Hanson, Utah
Ernest W. Hartung, Idaho
K. L. Janecek, North Dakota
Helen M. Miller, Idaho
Edythe Moore, California
Richard J. Neuman, Kansas
G. A. Rudolph, Nebraska
H. Theodore Ryberg, Alaska
Basil Stuart-Stubbs, Canada
Roderick G. Swartz, Washington
Eda Taylor, Arizona
Margaret Warden, Montana
David C. Weber, California
William H. Williams, Wyoming

Western Council for Continuing Education and Library Resources Program   (5)

Members not on Steering Committee:

Richard B. Engen
Marguerite B. Cooley
Ethel Crockett
Alma Jacobs
Eloise Ebert

Other Western State Librarians   (6)

Richard J. Wolfert, North Dakota
Jane T. Geske, Nebraska
Ernestine Gilliland, Kansas
James Buck, Colorado
May Chun, Hawaii
Russell L. Davis, Utah

Other Western ARL Library Directors   (15)

H. William Axford, University of Oregon
Page Ackerman, University of California, Los Angeles
LeMoyne Anderson, Colorado State University
Donald Davidson, University of California, Santa Barbara
Richard M. Dougherty, University of California, Berkeley
John R. Haak, University of California, San Diego
Roy L. Kidman, University of Southern California
Bernard Kreissman, University of California, Davis
Donald W. Koepp, Arizona State University
W. David Laird, University of Arizona
Leo Cabell, University of Colorado
Donald Nelson, Brigham Young University
Marion Milczewski, University of Washington
G. Donald Smith, Washington State University
James Ranz, University of Kansas

Western Network State Design Team Chairpersons   (13)

Others:

Alphonse Trezza, Executive Director, NCLIS
Henriette D. Avram, Chief, MARC Development Office, Library of Congress
Paul Janaske, USOE Program Officer
Lura Currier, Director, Pacific Northwest Bibliographic Center
Donald Simpson, Director, Bibliographical Center for Research
Sheila Thornton, California State Library Union Catalog
Mary Jane Reed, Washington Library Network
Hank Epstein, BALLOTS
T. John Metz, Executive Director, MIDLNET
Oscar Miller, Head Law Librarian, University of Colorado
Kevin Bunnell, Director, Division of General Regional Programs (WICHE)